

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Charleston WV Chemical Leak - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region III

Subject: POLREP #4
 Continuation of Response Operations
 Charleston WV Chemical Leak

Charleston, WV
 Latitude: 38.3685800 Longitude: -81.6066300

To:

From: Dennis Matlock and Melissa Linden, On-Scene Coordinators

Date: 2/4/2014

Reporting Period: 1/27/2014 through 2/3/2014

1. Introduction

1.1 Background

Site Number:	Contract Number:	
D.O. Number:	Action Memo Date:	
Response Authority: CERCLA	Response Type:	Emergency
Response Lead:	Incident Category:	Removal Assessment
NPL Status:	Operable Unit:	
Mobilization Date: 1/9/2014	Start Date:	1/9/2014
Demob Date:	Completion Date:	
CERCLIS ID:	RCRIS ID:	
ERNS No.:	State Notification:	
FPN#:	Reimbursable Account #:	

1.1.1 Incident Category

Tank failure and subsequent chemical release into the Elk River, Etowah, WV.

1.1.2 Site Description

The Site consists of one breached tank, which is component to the facility, along with the soils beneath the tank, the pathway towards the Elk River, and the affected portion of the Elk River.

1.1.2.1 Location

The incident occurred at the Freedom Industries, located at 1015 Barlow Drive, Charleston, Kanawha County, WV 25311.

1.1.2.2 Description of Threat

An imminent substantial endangerment to welfare and/or the public caused by a chemical release.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

WVDEP conducted the initial assessment of the scene, in response to an odor complaint to their Air Division. EPA mobilized to the Site and assumed a support role to WVDEP. EPA received reports through WVDEP that the chemical was identified as "Eastman Crude MCHM", which is a mixture of components, predominantly 4-methylcyclohexanemethanol. There is a licorice odor to the compound, which is caused by 4-(methoxymethyl) cyclohexanemethanol. The material was classified as non-toxic. However, analytical testing for this particular compound is still being developed; there is no drinking water method available. Dupont was assisting the West Virginia American Water Company (WVAWC) with the testing procedure.

The spill occurred from one of three tanks that contain the MCHM. The secondary containment around the tanks was inadequate and failed. It was estimated that 5,000 gallons of the material were released. However, the volume of the compound that actually entered the river is uncertain.

The RP utilized facility personnel and initiated the hiring of contractors to place boom along the left descending bank of the Elk River, adjacent to the area of the spill. The RP also hired contractors to conduct land clean-up operations.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

See previous POLREPs for site information from January 9, 2014 through January 26, 2014.

2.1.2 Response Actions to Date

See previous POLREP for actions conducted from January 21, 2014 through January 26, 2014.

January 27, 2014

The facility continued to pump water upgradient of the secondary containment area. The majority of the site is frozen and most of the holes/sumps dug inside the tank containment are frozen and cannot be pumped.

The facility revised their estimate of the amount of material leaked to 10,000 gallons. The facility's contractor continued to pump water from the intercept trench into an onsite tank for temporary storage. The facility planned to improve the intercept trench by installing perforated pipe and a sump under the liner. The liner will be placed over the pipe and will be tied into the base of the slope.

Ice in the river continued to cause difficulty with maintaining the river boom in place. The facility contractor continued to break the ice and to properly position the river booms. The booms will be allowed to freeze in place. Ice continued to be cleared from the outside of the boom so boats can access the booms along the facility shoreline.

The facility's remediation consultant, CEC, plans on collecting surface water and groundwater samples on January 29, 2014. EPA and WVDEP will collect split samples.

January 28, 2014

During a Multi-Agency Briefing at the WV American Water Company, the National Guard Civil Support Team announced that they will start sampling the 233 schools identified on the WVAWC distribution system within the 9 impacted counties. They will be collecting one sample per school from the kitchen sink.

EPA will be taking split samples on January 29 along with WV DEP and CEC, the facility's remediation contractor, from the collection trench, a seep behind the secondary containment area, and four monitoring wells down gradient of the tank farm. The Ft. Meade Lab is ready to run the samples (5-7

sample locations). The sampling will depend on the amount of water that has accumulated in the sumps. The samples will be analyzed for MCHM/PPH and total VOCs.

The facility is collecting clean water originating off-site into a dike at the perimeter of the facility and per agreement with WVDEP the water will be used to dilute the glycerin to produce a component of antifreeze. The product will be shipped to the facility's customers. The material is stored in tank 399.

EPA CID, FBI and CSB were on site. The investigative team will be making an entry into the tank that leaked.

The local media reported that a Marshall University professor found formaldehyde in a drinking water sample from a restaurant in Charleston, WV. EPA is reaching out to the professor to identify his sampling and analytical methods.

January 29, 2014

The facility continued to pump water from upgradient of the secondary containment area. The majority of the site remains frozen and most of the sumps dug inside the tank containment are frozen and cannot be pumped. The site team met with the facility's consultant to discuss amending the remediation plan to include improvements to the interceptor trench and installation of an additional sump.

Due to heavy ice conditions in the river, the booms are being allowed to freeze in place. Ice continued to be cleared from the outside of the boom so boats can access the booms along the facility shoreline.

The facility's remediation consultant, CEC, collected two surface water samples. EPA, WVDEP, and plaintiff representatives collected split samples. EPA's split samples were shipped to the Region 3 Lab for Trace VOC and MCHM/PPH analysis. CEC plans on re-developing monitor wells onsite to facilitate collection of groundwater samples, which should occur on Monday, February 3, 2014.

EPA continues to leave messages for the Marshall University professor who reported formaldehyde in a drinking water sample from a restaurant in Charleston, WV but no response to date. EPA's Ft. Meade lab is also investigating the formaldehyde issue.

CSB is onsite and is continuing their investigative work.

January 30, 2014

January 31, 2014

February 1, 2014

February 2, 2014

February 3, 2014

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The Responsible Party is identified as Freedom Industries, and is under orders from WVDEP. There are four orders and one revision to an order. Orders include: a cease and desist order; an order to develop a plan to empty all 14 tanks on Site; an order to remove all material from on-site above ground storage tanks (AST) by March 15, 2014; an order to report all on-site and all information of MCHM/PPH; and begin to dismantle all ASTs on or before March 15, 2014.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

MCHM/PPH boom/pads	solid/liquid	1,272 gallons (estimated)			transport off-site

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

EPA, EPA's contractors, and the USCG will support WVDEP's oversight of removal activities. The priority at this time is to contain the source and prevent further discharge of contaminants to the river. Improvements will be made to the interceptor trench area to allow water and potential product that may accumulate under the liner to be pumped out. Future activities will include an assessment of an extent of contamination on Site. EPA will provide support to WVDEP with sampling activities, and other technical support, upon request.

2.2.1.2 Next Steps

- Divert the runoff water that is entering the containment area;
- Complete improvements to the interceptor trench at the toe of the slope;
- Utilize a vacuum truck to remove soil from the suspected MCHM-contaminated sloped areas on Site.

2.2.2 Issues

- There is the possibility of an unknown amount of MCHM/PPH and potentially other chemical liquids may exist beneath the tank;
- There is an unknown amount of MCHM/PPH that has seeped into the soils/materials located along the river bank;
- It is uncertain if the chemicals are still leaking into the Elk River from locations along the river bank, adjacent to the facility.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
START	\$100,864.00	\$73,152.00	\$27,712.00	27.47%
Intramural Costs				
Total Site Costs	\$100,864.00	\$73,152.00	\$27,712.00	27.47%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Freedom Industries
EPA OSC on Site (Advisory Role)

2.5.2 Liaison Officer

EPA Mark Ferrell

2.5.3 Information Officer

3. Participating Entities

3.1 Unified Command/Facility (Freedom Industries)

WVDEP
USEPA
USCG
Freedom Industries

3.2 Cooperating Agencies

WVDHHR
National Guard
WVDNR
ORSANCO
WVAWC
CSB
CDC/ATSDR

4. Personnel On Site

WVDEP
USCG
USEPA
START (TechLaw)
Freedom Industries
Clean Harbors
Diversified Services LLC
CSB
FBI

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.